CLAIMS

1. A planer comprising:

a shoe, the shoe defining an aperture;

a body mounted on the shoe; the body defining an exhaust aperture and including a wall, the wall defining a recess;

a cutting drum rotatably mounted within the recess, the drum having a periphery and a portion of the periphery of the cutting drum projects through the aperture in the shoe;

a motor mounted within the body to rotatingly drive the cutting drum;

a cutting blade mounted on the periphery of the drum and adapted for cutting a work piece when the drum is rotating, the cutting action of the blade causing debris created by the cutting to be ejected from the recess;

an airflow generator for producing an airflow within the body;

a conduit defined within the body for directing the airflow, the conduit in communication with the exhaust aperture and connected to the recess for entraining and removing debris ejected from the recess; and

a removable deflector having an inner end and an outer end, the deflector insertable through the exhaust aperture and connectable to the conduit for guiding the air flow and entrained debris from within the body to outside of the body, and wherein the deflector is insertable at a downward slope from the outer end to the inner end.

2. A planer as claimed in claim 1 wherein the exhaust aperture is a first exhaust aperture and the body defines a second exhaust aperture in communication with the first exhaust aperture and the conduit, and the removable deflector is insertable through one of the first exhaust aperture and the second exhaust aperture.

3. A planer as claimed in claim 1 and wherein the wall in the body defines an expulsion aperture and the conduit is connected to the recess by the expulsion aperture, and the cutting action of the blade causes debris created by the cutting to be ejected from the recess through the expulsion aperture and into the conduit substantially along a first direction, and the airflow in the conduit is directed within the body to a point below the expulsion aperture and then is directed by the conduit to be blown across the aperture substantially along a second direction and the first direction of the debris and the second direction of the airflow intersect at an acute angle.

4. A planer as claimed in claim 3 and wherein the wall defining the expulsion aperture also defines a top to the expulsion aperture, said top located at a height above the shoe, and the planer body further defines a nozzle located within the conduit at substantially the same height as the top of the expulsion aperture, and the conduit divides the airflow into a first part and a second part, the first part of the airflow passes the point below the expulsion aperture before flowing past the aperture, and the second part of the airflow passes through the nozzle and then exits the nozzle substantially in a third direction, and the third direction of nozzle airflow and the first direction of the debris intersect at an acute angle.

5. A planer as claimed in claim 3 and wherein the conduit directs the airflow over the removable deflector prior to directing the airflow to the point below the expulsion aperture.

6. A planer as claimed in claim 5 and wherein the removable deflector defines a portion of the conduit where the airflow passes over the deflector.

7. A planer as claimed in claim 1 and further comprising a flap movable from a first position where the flap closes the exhaust aperture to a second position where the flap does not close the exhaust aperture.

8. A planer as claimed in claim 2 and further comprising a flap movable from a first position where the flap closes the first exhaust aperture to a second position where the flap closes the second exhaust aperture.

9. A planer as claimed in claim 8 and wherein the flap extends from the body, the flap directs the airflow and entrained debris through the second exhaust aperture.

10. A planer as claimed in claim 7 and wherein the flap is pivotably mounted within the body and is pivotable between the first position and the second positions.

11. A planer as claimed in claim 10 and wherein the biasing means comprises a spring.

12. A planer as claimed claim 10 and wherein the flap extends from the axis of pivot to the side of the planer.

13. A planer as claimed in claim 7 and wherein the flap is resiliently biased to the first position.

14. A planer as claimed in claim 13 and further comprising a spring, the spring biasing the flap to the first position.